

**REMARKS**

***Status of the Claims***

Claims 1-13, 15, 17-40, 42-45, 52-59, and 61-72 are pending. The final Office Action dated March 17, 2006, rejected claims 1-13, 15, 17-40, 42-45, 52-59, and 61-72 under 35 U.S.C. § 103(a) as being unpatentable over various combinations of applied references. Applicants submit herewith a Request for Continued Examination. Independent claims 1, 15, 20, 28, 29, 45, 59, and 60 have been amended in this response to the final Office Action, to address and overcome the rejections. Favorable reconsideration is respectfully requested.

***Personal Interview of June 20, 2006***

Applicants wish to sincerely thank the Examiner for the courtesies extended to Applicants' representative during the personal interview conducted June 20, 2006. At the interview, proposed changes to the claims to include subject matter to delineate a progression or further action in the apparatus or process based on the information stored in the carrier, among other things, was discussed.

***Rejection of Claims 1-7, 12, 15, 18, 19, and 70 Under 35 U.S.C. §103(a)***

At page 2 of the final Office Action, the Examiner rejected claims 1-7, 12, 15, 18, 19, and 70 under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,541,211 to Patek et al. (Patek et al.), in view of U.S. Patent No. 6,094,137 to Rasch et al. (Rasch et al.).

Applicants have amended claims 1 and 15 in response to this rejection. The amended claims overcome the rejection of these claims based on Patek et al. in view of Rasch et al.

Claim 1 recites an apparatus for associating information with a biological reagent, including

a “carrier for supporting the biological reagent” and “at least one tag... operable to be read by a reader.” Claim 1 recites that the “tag comprises licensing rights information for at least one of the carrier and the biological reagent” and that the licensing rights information is “readable by the reader to at least one of authorize, validate, and authenticate use of at least one of the carrier and the biological reagent in a predetermined assay.”

Patek et al. describes the use of an RFID tag that is encoded with identification information for sample inserts or lanterns that are placed in multiple reaction wells. The RFID tag taught in Patek et al. is not “readable by the reader to at least one of authorize, validate, and authenticate use of at least one of the carrier and the biological reagent in a predetermined assay.” The RFID tag described in Patek et al. instead provides a passive identification function that does not control the authorization, validation, or authentication of the carrier or reagent.

Rasch et al. does not cure the deficiencies of Patek et al. Rasch et al. describes an electronic tag which is inserted in the binder of a book to store certain types of copyright or licensing information. There is no suggestion in Rasch et al. that the “licensing rights information” is “readable by the reader to at least one of authorize, validate, and authenticate use of at least one of the carrier and the biological reagent in a predetermined assay.” The invention claimed in claim 1 is therefore not suggested by Patek et al. combined with Rasch et al., even if their combination were proper. Claim 1 therefore distinguishes over Patek et al. in view of Rasch et al., and the rejection based on those references is overcome. This rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

Claims 2-7, 12, and 70 distinguish over Patek et al. in view of Rasch et al. for at least the same reasons as claim 1, from which they depend, does as well as in view of the further features recited therein. Claim 3, for example, recites “wherein the carrier comprises a surface plasmon

resonance array,” a feature not described in Patek et al. or Rasch et al. Lacking a teaching of these and other recited features, claims 2-7, 12, and 70 distinguish over Patek et al. in view of Rasch et al., and the rejection of the claims based on those references is overcome. This rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

Claim 15 recites an apparatus for associating information with the biological sample, including a “carrier” and “at least one RFID tag.” Claim 15 recites that the RFID tag contains “licensing rights information” that is “readable by the RFID reader to at least one of authorize, validate, and authenticate use of at least one of the carrier and the biological reagent in a predetermined assay.” As noted above in connection with claim 1, Patek et al. merely describes the storage of identification information for sample well inserts, which information does not govern the use of those inserts in any assay or other process. Rasch et al., as discussed above, describes an electronic tag embedded in a book for copyright and other licensing purposes, but neither Patek et al., Rasch et al., nor their combination, discloses or suggests an apparatus for associating information with a biological reagent, as claimed in claim 15, including the encoding of “licensing rights information” in “at least one RFID tag,” the licensing rights information being “readable to at least one of authorize, validate, and authenticate use of at least one of the carrier and the biological reagent in a predetermined assay.” Lacking suggestion of the invention as claimed, claim 15 distinguishes over Patek et al. in view of Rasch et al., and the rejection of claim 15 based on those references is overcome. This rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

Claims 18 and 19 distinguish over Patek et al. in view of Rasch et al. for at least the same reasons as claim 15, from which they depend, does and because of the further features recited

therein. Claim 18, for example, recites that the “licensing rights information” further comprises “information regarding a number of times the biological reagent can be used in connection with a particular assay,” a limitation on the use of the reagent which neither Patek et al. nor Rasch et al. recognizes or describes. The rejection of claims 18 and 19 under 35 U.S.C. §103(a) based on Patek et al. in view of Rasch et al. is overcome. This rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

***Rejection of the Claims 8, 9, 13, and 20-27 Under 35 U.S.C. §103(a)***

At page 3 of the final Office Action, the Examiner rejected claims 8, 9, 13, and 20-27 under 35 U.S.C. §103(a) as allegedly being unpatentable over Patek et al., in view of Rasch et al., and further in view of U.S. Patent No. 6,201,474 to Brady et al. (Brady et al.). Applicants respectfully traverse this rejection.

As noted above in connection with claims 1 and 15, neither Patek et al., Rasch et al., nor their combination disclose or suggest an apparatus for associating information with a biological reagent, including “licensing rights information” that is “readable” to “at least one of authorize, validate, and authenticate use of at least one of the biological reagent and the carrier in a predetermined assay.” The plastic media carrier of Brady et al. that embeds an RFID tag does not correct the deficiencies of Patek et al. combined with Rasch et al. In particular, Brady et al. fails to suggest authorization, validation, or authentication of a reagent or carrier. Claims 8, 9, and 13 distinguish over Patek et al. in view of Rasch et al. and further in view of Brady et al. This rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

Claim 20 recites an apparatus for “associating licensing rights information with a

microarray,” including an “RFID tag,” and wherein the “licensing rights information” comprises information on whether a user has a valid license to use the microarray in a predetermined assay. As noted generally above in connection with claims 1 and 15, Patek et al. fails to disclose or suggest an apparatus having a tag or RFID tag in which “licensing rights information” comprises information on whether a user has a valid license to use the microarray in a predetermined assay. Even a suggestion of such a feature is lacking in Brady et al. Neither Patek et al., Rasch et al., Brady et al., nor their combination, discloses or suggests an apparatus as claimed in claim 20 including “licensing rights information” governing use of the microarray as claimed. The rejection of claim 20 based on those references is therefore overcome. This rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

Claims 21-27 distinguish over Patek et al. in view of Rasch et al., and further in view of Brady et al., for at least the same reasons as claim 21, from which they depend, does and because of the further features recited therein. Claim 21, for example, recites that the “RFID tag comprises nucleic acid sequence information and location information for at least one unique oligonucleotide spot in the microarray,” a feature not disclosed or suggested by the references or their combination. The rejection of claims 21-27 under 35 U.S.C. §103(a) as being unpatentable over Patek et al., in view of Rasch et al., and in further view of Brady et al., is therefore overcome. The rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

***Rejections of the Claims 10, 11, 17, 28-38, 45, 52-58, 66-69, 71, and 72 Under 35 U.S.C. §103(a)***

At page 6 of the final Office Action, the Examiner rejected claims 10, 11, 17, 28-38, 45, 52-58, 66-69, 71, and 72 under 35 U.S.C. §103(a) as allegedly being unpatentable over Patek et al. in

view of Rasch et al., and further in view of U.S. Patent No. 6,429,016 to McNeil (McNeil). Applicants respectfully traverse this rejection.

At page 6 of the Office Action, paragraph 5, the Examiner conceded that Patek et al. and Rasch et al. fail to disclose or suggest a tag or RFID reader, but cited McNeil in to correct this deficiency. As discussed above in connection with claim 1, neither Patek et al., Rasch et al., nor their combination, disclose or suggest an overall apparatus as claimed in claim 1, for example, including the feature of “stored licensing rights information” which is readable to “at least one of authorize, validate, and authenticate” the use of a reagent or carrier in a predetermined assay. The additional reference of McNeil does not cure this deficiency. Claims 10 and 11 therefore distinguish over Patek et al. in view of Rasch et al., and in further view of McNeil, and the rejection based on those references is overcome. This rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

At page 6 of the Office Action, the Examiner rejected claim 17 under 35 U.S.C. §103(a) as being unpatentable over Patek et al. in view of Rasch et al., and further in view of McNeil. As noted in connection with claims 10 and 11, neither Patek et al., Rasch et al., McNeil, nor their combination discloses or suggests an apparatus containing “licensing rights information” that can be used to “at least one of authorize, validate, or authenticate” the recited uses of the carrier and/or reagent. The rejection of claim 17 is therefore overcome. The rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

The Examiner rejected claim 28 under 35 U.S.C. §103(a) as being unpatentable over Patek et al., in view of Rasch et al., and further in view of McNeil. The Office Action conceded at page 7 that the “information stored on the tag does not include licensing rights information” in the system of Patek et al. Claim 28 recites that the “licensing rights information” is readable to “at least one of

authorize, validate, and authenticate use of at least one of the carrier and the biological reagent in a predetermined assay.” Claim 28 further recites “at least one instrument” comprising an “output for providing an authorization indication of the biological reagent in a predetermined assay based on the licensing rights information,” a type of information and operation that neither Patek et al., Rasch et al., McNeil, nor their combination discloses or suggests. The rejection of claim 28 under 35 U.S.C. §103(a) as being unpatentable over Patek et al., in view of Rasch et al., and further in view of McNeil is overcome. This rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

The Examiner rejected claim 29 under 35 U.S.C. §103(a) as being unpatentable over Patek et al. in view of Rasch et al., and in further view of McNeil. Claim 29 recites an apparatus for associating information with a biological reagent, including “at least one RFID tag,” the RFID tag comprising “instrument operation information” that is readable to “at least one of authorize, validate, and authenticate at least one instrument operation associated with the biological reagent.” Neither Patek et al. nor Rasch et al. discloses or suggests the use of “instrument operation information” that can be used to authorize, validate, or authenticate the use or operation of the instrument as recited. McNeil fails to cure the deficiencies of Patek et al. and Rasch et al., and claim 29 distinguishes over Patek et al. in view of Rasch et al., and further in view of McNeil. The rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

Claims 30-38 distinguish over Patek et al., in view of Rasch et al., and further in view of McNeil, for at least the same reasons that claim 29, from which they depend, does and because of the further features recited therein. Claim 36, for example, recites that the instrument operation information “comprises instructions for the operation of a sample pump,” an operation not

disclosed or suggested by the references or their combination. The rejection of claims 30-38 is overcome. The rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

The Examiner rejected claim 45 under 35 U.S.C. §103(a) as being unpatentable over Patek et al. in view of Rasch et al., and further in view of McNeil. Claim 45 recites a method for associating information regarding biological reagents with carriers, including receiving, from the RFID tag, "licensing rights information" associated with the biological reagent, the licensing rights information being readable to "at least one of authorize, validate, and authenticate use of at least one of the carrier and the biological reagent in a predetermined assay." As discussed above, neither Patek et al. nor Rasch et al. discloses or suggests the receiving of "licensing rights information" as claimed, and McNeil fails to cure at least this deficiency. The rejection of claim 45 based on these references is overcome. This rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

The Examiner rejected claims 52-58 under 35 U.S.C. §103(a) as being unpatentable over Patek et al. in view of Rasch et al., and further in view of McNeil. Claims 52-58 distinguish over Patek et al. in view of Rasch et al., and further in view of McNeil, for at least the same reasons that claim 45, from which they depend, does and because of the further features recited therein. Claim 52, for example, recites that the "supplemental information comprises material safety data sheet (MSDS) information," a limitation neither disclosed nor suggested by the references. The rejection of claims 52-58 is overcome. The rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

The Examiner rejected claims 66-69 under 35 U.S.C. §103(a) as being unpatentable over Patek et al. in view of Rasch et al., and in further view of McNeil. Claim 66 recites a method for



associating information regarding operations for biological reagents, including “receiving, from the RFID tag, instrument operation information associated with the biological reagent,” the instrument operation being readable to “at least one of authorize, validate, and authenticate at least one instrument operation associated with the biological reagent.” As discussed above, neither Patek et al., Rasch et al., nor their combination discloses or suggests the receipt of “instrument operation information” in a method as claimed, nor the use of such information to authorize, validate, or authenticate at least one instrument operation. The McNeil reference fails to cure at least this deficiency. Claim 66 therefore distinguishes over Patek et al., in view of Rasch et al., and further in view of McNeil. The rejection of claim 66 based on those references is overcome. The rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

Claims 67-69 distinguish over Patek et al. in view of Rasch et al. and further in view of McNeil, for at least the same reasons as claim 66, from which they depend, does and because of the further features recited therein. Claim 67, for example, recites that the “instrument operation information comprises parameters for controlling software on a biological instrument,” a feature that is neither disclosed nor suggested by any of the references or their combination. The rejection of claims 67-69 is therefore overcome. The rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

The Examiner rejected claims 71 and 72 under 35 U.S.C. §103(a) as being unpatentable over Patek et al. in view of Rasch et al., and further in view of McNeil. Claims 71 and 72 distinguish over the references for at least the same reasons as claim 1 does, and because of the further features recited therein. Claim 71 recites, for instance, that the “instrument is configured to authorize use of at least one of the carrier and the reagent under terms of a license,” a feature that is

neither disclosed nor suggested by the references or their combination. The rejection of claims 71 and 72 is overcome. The rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

***Rejection of Claims 39, 40, 42, and 44 Under 35 U.S.C. §103(a)***

At page 10 of the final Office Action, the Examiner rejected claims 39, 40, 42, and 44 under 35 U.S.C. §103(a) as allegedly being unpatentable over Patek et al., in view of McNeil, and further in view of U.S. Patent No. 6,211,781 to McDonald (McDonald). At page 10, paragraph 6 of the Office Action, the Examiner conceded that Patek et al. fails to describe that any embedded information can include real-time physical location information. Applicants respectfully traverse the rejection of claim 39 under 35 U.S.C. §103(a). Neither McNeil nor McDonald cures the admitted deficiency of Patek et al. to describe “real-time physical location information associated with the biological reagent.” Not even the need for such information is recognized by any of the references. McDonald merely describes, as noted in Applicants’ prior responses, tracking information used to schedule the delivery of mail pieces. Lacking a suggestion of the method as claimed, including “receiving, from the tag, real-time physical location information associated with the biological reagent,” claim 39 distinguishes over Patek et al. in view of McNeil, and further in view of McDonald. The rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

The Examiner rejected claims 40, 42, and 44 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Patek et al., in view of McNeil, and further in view of McDonald. Claims 40, 42, and 44 distinguish over Patek et al., in view of McNeil, and further in view of McDonald for at least the same reasons that claim 39, from which they depend, does and because of the further

features recited therein. Claim 40, for example, recites “tracking the biological reagent as the biological reagent undergoes a reagent manufacturing process,” an action not described or suggested in the references or their combination. The rejection of claims 40, 42, and 44 is overcome. The rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

***Rejection of the Claim 43 Under 35 U.S.C. §103(a)***

At page 11 of the final Office Action, the Examiner rejected claim 43 under 35 U.S.C. §103(a) as allegedly being unpatentable over Patek et al., in view of McNeil, McDonald, and further in view of U.S. Patent No. 6,483,434 to UmiKar (UmiKar). The Examiner, at page 11, paragraph 7, conceded that neither Patek et al., McNeil, nor McDonald described the activity of “receiving real-time location using GPS coordinates.” UmiKar fails to cure at least the deficiencies of Patek et al., McNeil, and McDonald, and all four references taken singly or in combination, fail to disclose or suggest a method as claimed including receiving “real-time physical location information associated with the biological reagent” along with “GPS coordinates.” The rejection of claim 43 is overcome. The rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

***Rejection of the Claims 59 and 61-65 Under 35 U.S.C. §103(a)***

At page 11 of the final Office Action, the Examiner rejected claims 59 and 61-65 under 35 U.S.C. §103(a) as allegedly being unpatentable over Patek et al., in view of Rasch et al., McNeil, and further in view of U.S. Patent No. 6,317,028 to Valiulis (Valiulis). Claim 59 recites a method for associating information regarding biological reagents with carriers for supporting the biological

reagents, including “receiving, from the RFID tag, licensing rights information” and “authorizing under terms of the licensing rights information, use of the biological reagent in a predetermined biological assay.” As noted above in connection with claims 28, 66, and others, Patek et al., Rasch et al., and McNeil, singly or in combination, fail to disclose or suggest receipt for use of “licensing rights information” including, as recited in claim 59, “authorizing under terms of a license associated with the licensing rights information, use of the biological reagent in a predetermined biological assay.” The teachings of Valiulis, including RFID password challenges, fail to cure the deficiencies of Patek et al. combined with Rasch et al. and McNeil. None of the references, singly or in combination, discloses a method as claimed including “authorizing under terms of a license associated with the licensing rights information, use of the biological reagents in a predetermined biological assay.” The rejection of claim 59 is overcome. The rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

Claims 61-65 distinguish over Patek et al. in view of Rasch et al., and McNeil, and further in view of Valiulis, for at least the same reasons as claim 59 from which they depend, as well as the further features recited therein. Claim 64, for example, recites “validating integrity of the biological reagent for use in connection with a specific biological assay,” an activity neither disclosed nor suggested by Patek et al., Rasch et al., McNeil, Valiulis, or their combination. The rejection of claims 61-65 is overcome. The rejection is respectfully traversed. Favorable reconsideration and withdrawal of the rejection are respectfully requested.

## **CONCLUSION**

Applicants have duly considered the rejections of the claims in the Office Action dated March 17, 2006, and addressed each by the foregoing amendments and remarks. Each of claims 1-

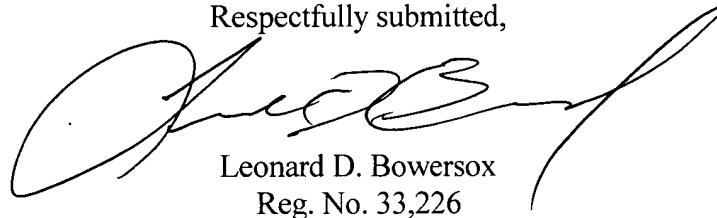
U.S. Patent Application No. 10/805,093  
Amendment dated July 17, 2006  
Responsive to Final Office Action Dated March 17, 2006

13, 15, 17-40, 42-45, 52-59, and 61-72 distinguish over the applied references. The application is in condition for allowance. Favorable reconsideration and early allowance of the pending claims are respectfully requested.

Should the Examiner deem that any further action by Applicants or Applicants' undersigned representative is desirable and/or necessary, the Examiner is invited to telephone the undersigned at the number set forth below.

If there are any other fees due in connection with the filing of this response, please charge the fees to deposit Account No. 50-0925. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such extension is requested and should also be charged to said Deposit Account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Leonard D. Bowersox', is written over the typed name and registration number.

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